

National Aeronautics and Space Administration



REACH
—NEW—
HEIGHTS

BENEFIT
—ALL—
HUMANKIND

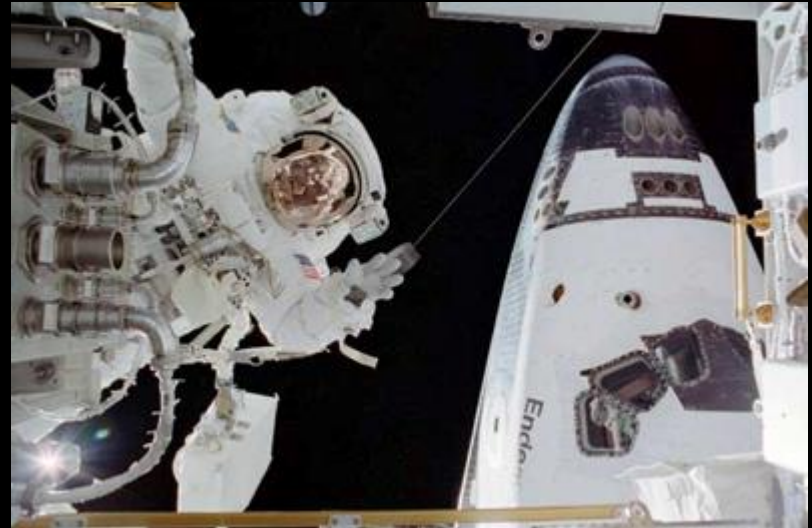
REVEAL
—THE—
UNKNOWN



NASA Communications

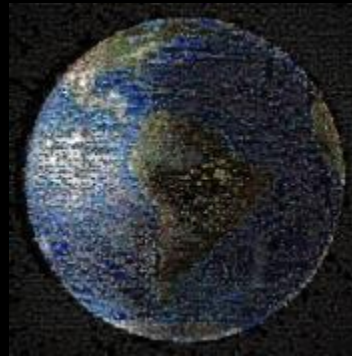


Big Picture – Shifting our stakeholders' images of NASA from ...

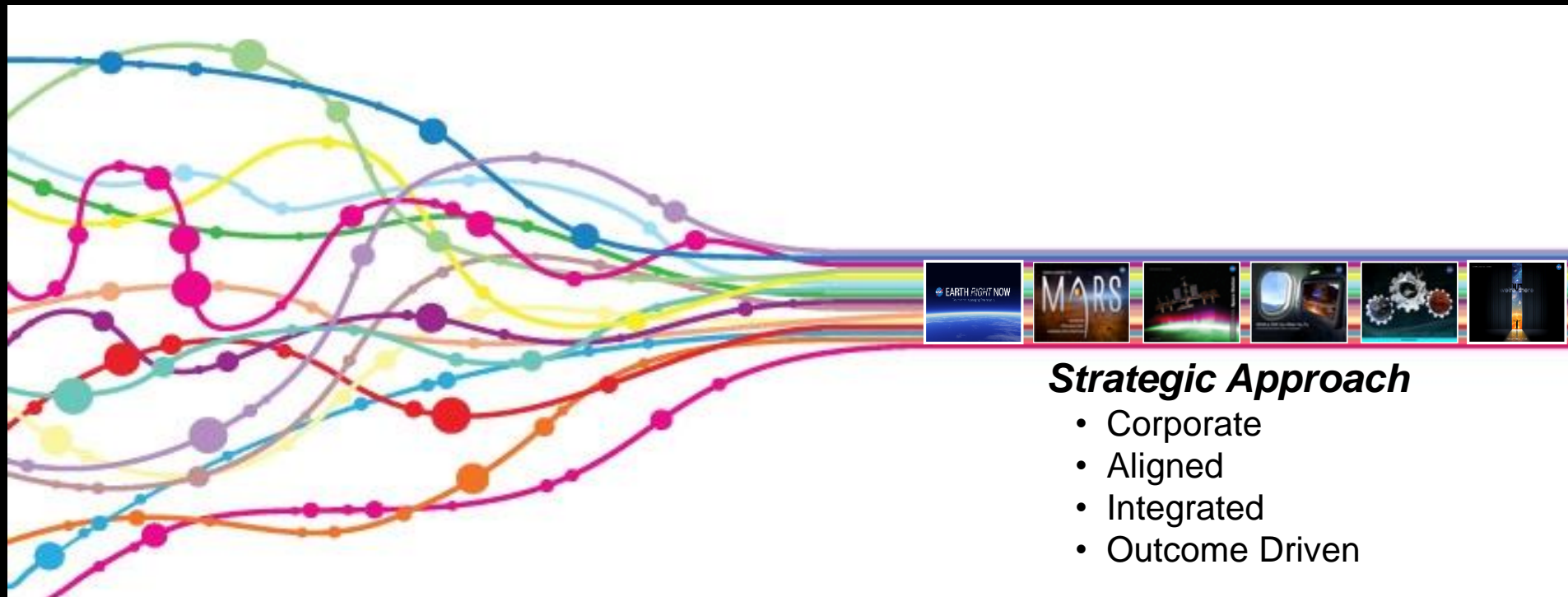


NASA Communications

To . . .



Changing Our Operational Model and Fostering Integration



Strategic Approach

- Corporate
- Aligned
- Integrated
- Outcome Driven

NASA Communications Priorities



Earth Right Now.
*Your planet is changing.
We're on it.*
#EarthRightNow



Technology.
Technology drives exploration.
#321TechOff



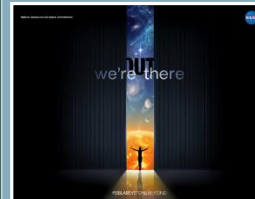
ISS.
Off the Earth, for the Earth.
#ISS



Aeronautics.
NASA is with you when you fly.
#FlyNASA



Mars.
Join us on the journey.
#JourneytoMars

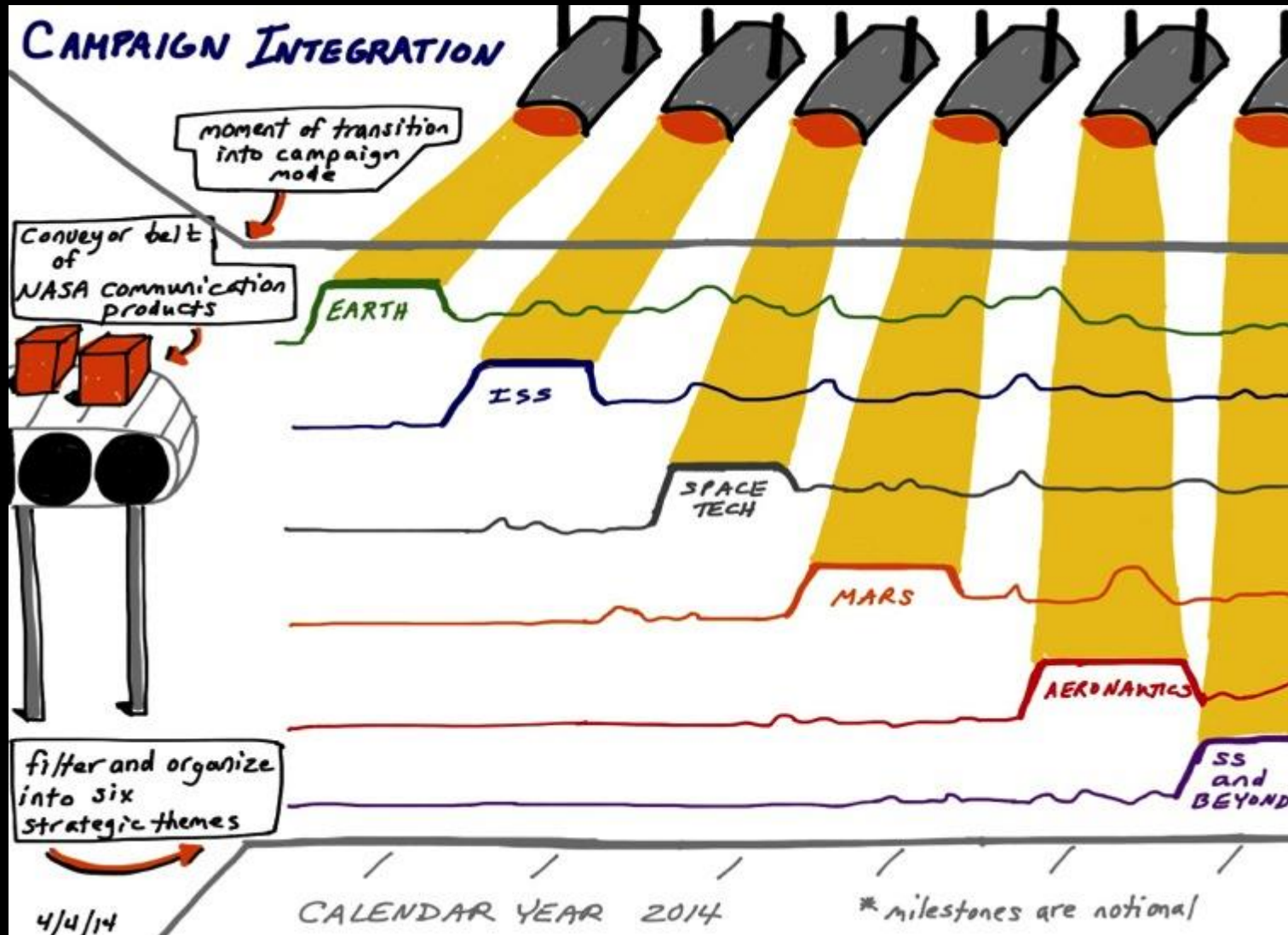


Solar System and Beyond.
NASA: We're Out There.
#NASABeyond

NASA Communications Priorities

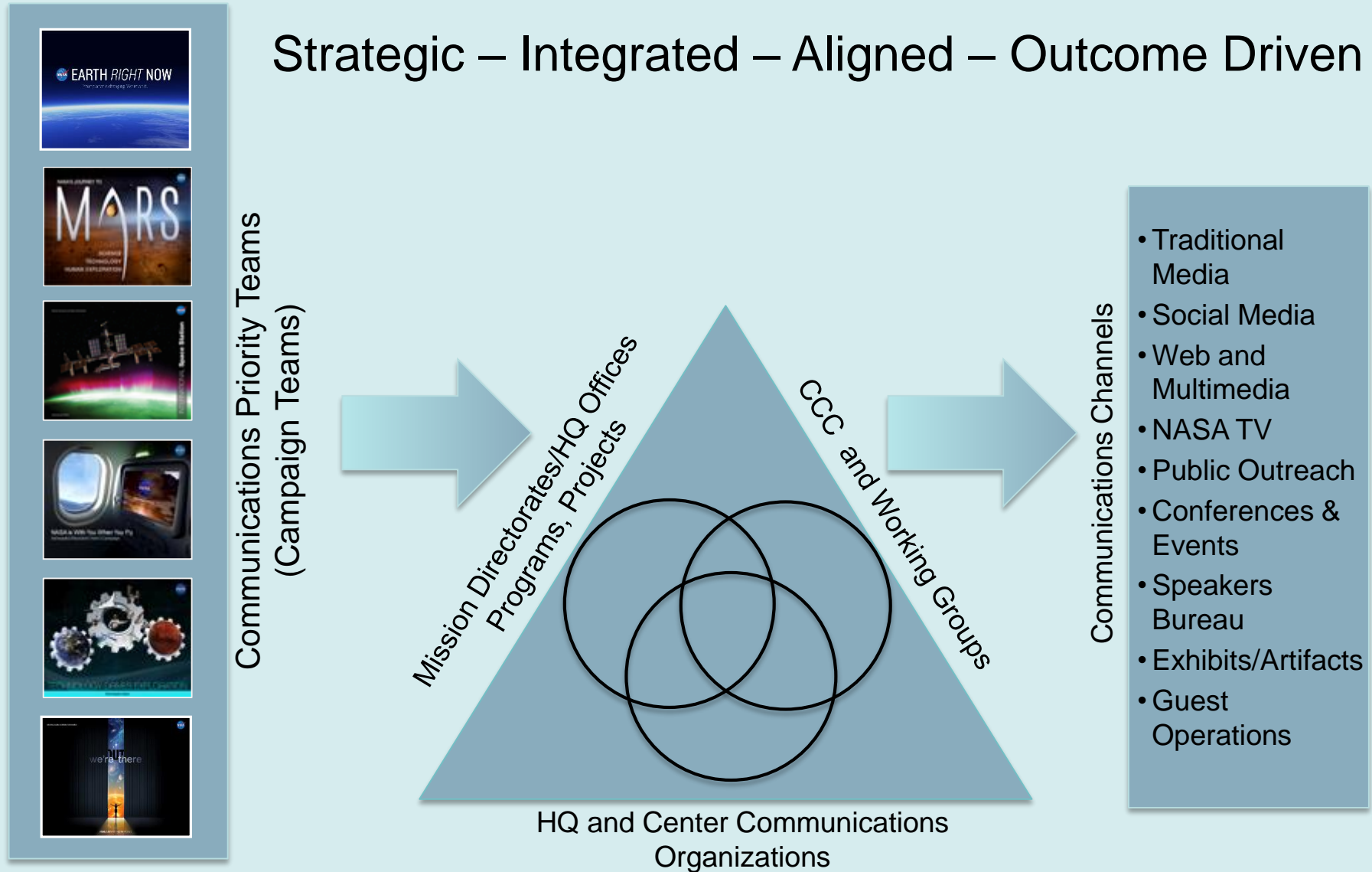


Integration across our six Communications Priorities



Changing Our Operational Model and Fostering Integration

Strategic – Integrated – Aligned – Outcome Driven





NASA AERONAUTICS
NASA is with you when you fly



EARTH *RIGHT* NOW

Your planet is changing. We're on it.



INTERNATIONAL SPACE STATION

Off the Earth, For the Earth



NASA'S JOURNEY TO



MARS

A composite image of the Martian surface. The foreground shows reddish-brown soil with dark rocks and a small, dark, rectangular object that looks like a rover's wheel track. The background is a vast, flat, reddish-brown landscape under a blue sky. The planet Mars is visible in the sky, positioned within the large, white, stylized letter 'A' of the word 'MARS'. The planet is orange-brown with some darker spots. The sky transitions from a deep blue at the top to a lighter blue near the horizon.

SOLAR SYSTEM AND BEYOND

NASA: We're Out There



NASA

we're out there





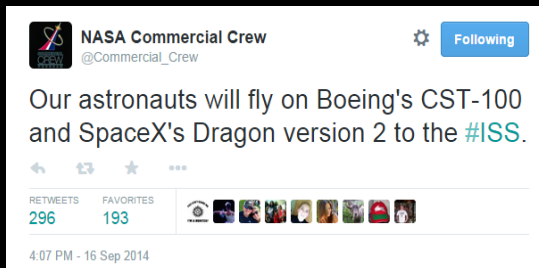
Technology Drives Exploration

NASA COMMUNICATIONS

Launch America



Overall Reach: 2.94 Billion
Facebook Reach: 4.6 million **70,000 Blog Views**
“Biggest NASA News Event of the Year”
Twitter Engagement: 20,000 71,628 Video Views
Top Two U. S. Gov Tweets **Twitter Reach: 3 million**
1,000 + News Stories NASA TV Plays: 40,000



“One giant leap for NASA – and U.S.”

- Washington Post

- Story carried on every major broadcast network and publication framed with NASA messaging of returning flight of American astronauts to U.S. soil
- Biggest event of the year until Orion’s test flight
- Nearly 4 million Twitter impressions
- Announcement 40% of NASA.gov web traffic for the week
- 40,000 concurrent NASA Television streams of the news conference
- Media Advisory had 300,000 page views, 2X any other announcement

NASA COMMUNICATIONS

Orion Test Flight



“Orion: NASA’s next giant leap.”

- NBC News

- Succeeded in framing the flight and other Agency missions and projects in the broader “Journey to Mars” context
- 27,000 VIP guests
- 2,900+ media reports
- 157 newspaper front pages worldwide
- @NASA Twitter account reached 47 million people
- #Orion & #Journey To Mars top trending worldwide hashtags
- First NASA Social with every field center participating
- NASA Facebook page reached 13.5 million launch day
- 5 million visits to NASA.gov launch day, more than a typical week
- Six hours of live, NASA TV coverage

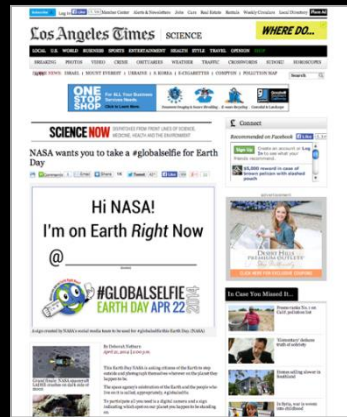


NASA COMMUNICATIONS

Earth Right Now



Shareables



Global Selfie Campaign



Earth Day @Union Station, D.C.



Ask A Climate Scientist



Monthly Quizzes

NASA COMMUNICATIONS

www.nasa.gov (as of June 5, 2015)



- 300K visits per day
- Customer satisfaction among highest in government, closer to commercial sites like Netflix and Amazon
- Webby Awards
 - 2 judges' awards for government
 - 7 "People's Choice" awards (public vote)
- Event-driven traffic
 - 3.2 M visits - Orion launch (12/04/2014)
 - 4.4 M visits - day of Russian meteorite (02/15/2013)
- Audience:
 - General public: 48 %
 - University faculty/student: 15 %
 - K-12 student: 9 %
 - Parent: 7 %
 - K-12 educator: 4 %
 - Employee/contractor/researcher: 3 %
 - News media: 2 %
 - Other: 13 %

NASA COMMUNICATIONS

Social Media Flagship Accounts (as of June 5, 2015)



Facebook – 10.8M likes



Twitter – 10.4M followers



Instagram – 3.1M followers



Google+ – 2.4M followers





What is Risk?

(Technical) Risk =

Probability of a Hazard x Impact of the Hazard Occurring

(Perceived) Risk =

Technical Risk x Nature of the Hazard x Context of the Perceiver



Perceived Risk is about *Context*

Risks Perceived to ...

- Be **voluntary**
- Be under an **individual's control**
- Have clear **benefits**
- Be distributed **fairly**
- Be **natural**
- Be **statistical**
- Be generated by a **trusted source**
- Be **familiar**
- Affect **adults**

Are More Accepted Than ...

Risks *perceived* as being **imposed**

Risks *perceived* to be **controlled by others**

Risks *perceived* to have **little or no benefit**

Risks *perceived* to be **unfairly distributed**

Risks *perceived* to be **manmade**

Risks *perceived* to be **catastrophic**

Risks *perceived* to be generated by an **mistrusted source**

Risks *perceived* to be **exotic**

Risks *perceived* to affect **children**



Communication Can Fail Because ...

- It doesn't take into account the psychological basis of the perception of risk
 - *It fails to recognize why people respond to risks the way they do*
- It refuses to accept that this “irrational” behavior is how humans are programmed to try to protect themselves
 - *Perception of risk is ‘hardwired’ and we can’t help it – it’s how we, as a species, survived*
- It has the goal of making everyone see the risk as the communicator sees it
 - *“Decide-Announce-Defend” or “Just-the-Facts” approaches don’t work*

NASA COMMUNICATIONS

Planetary Protection Program



In 1992, a Task Group on Planetary Protection, appointed by the Space Studies Board (SSB) of the National Research Council (NRC) to study issues relating to the biological contamination of Mars recommended “that NASA make every attempt to inform the public about current planetary protection plans and provide continuing updates concerning Mars exploration and sample return.” The task group concluded that “great public concern over the question of outbound contamination” was unlikely:

... if the public understands the scientific objectives and is aware that the issue of contamination has been addressed (and that appropriate precautions are being taken). The better the effort at *public education and the earlier it begins*, the smaller the likelihood that there will be public concern and negative reaction. In the case of sample return missions...the potential for negative reaction is much greater and that the need for public education and involvement is therefore even greater.

Space Studies Board, Task Group on Planetary Protection. Biological contamination of Mars: issues and recommendations. Washington, DC: National Academies Press, 1992, p. 55.



NASA Planetary Protection Program Communication Strategy (2012)

This communication strategy for planetary protection aims to sustain an ongoing dialogue with interested audiences, guiding efforts to explain the science, technology, and risk involved in planetary protection plans for solar system exploration missions. This strategy rests on a conception of communication as an ongoing, interactive process that promotes *public dialogue* and accommodates a diversity of perspectives. Approaching communication as a dialogue can enable greater *public engagement*, more informed public decision-making, enduring public trust and more effective communication about science, technology and risks.

NASA's Planetary Protection Program consequently expanded its communication research initiative to address the nature, needs, and interests of public audiences. The communication strategy described here is a product of this expansion of effort, addressing the ways and means of informing internal and external, expert and non-expert, audiences.

NASA COMMUNICATIONS

COSPAR Workshop on Ethical Considerations for Planetary Protection in Space Exploration



COSPAR should encourage its members and the associated states to undertake *public dialogue and engagement* efforts at the national and/or regional level concerning ethics in space exploration, with the ultimate purpose of having public sentiment (including public perception) integrated appropriately into COSPAR policy deliberations. In addition, COSPAR should ask the PPP and PEX panels to hold a workshop on public engagement, consultation, and participation in policymaking in order to inform members about the premises, principles, and purposes of public engagement activities and best practices.

NASA COMMUNICATIONS



COSPAR Workshop on Ethical Considerations for Planetary Protection in Space Exploration

As part of its recommendations on matters related to Communications and Public Engagement, the participants noted the following points:

- COSPAR should encourage its members and associated states to initiate and sustain a *broad-reaching public dialogue* about the ethical aspects of space exploration and planetary protection and to *conduct public engagement and public consultation efforts* at national and/or regional levels concerning ethics in space exploration.
- COSPAR policy regarding space exploration and the preservation of outer space environments should take into account and reflect the international trend *toward sincere consultation with a broad range of publics* about the ethical and policy issues associated with space exploration, as has been put into practice for consultation about developments in biotechnology, nanotechnology, neuroscience, and so on, in both Europe and the United States and Canada.
- Toward addressing the challenges of assessing and incorporating public opinion in policy and planning, COSPAR should ask its Panels on Planetary Protection (PPP) and Space Exploration (PEX) to hold a workshop involving relevant experts on *public engagement, consultation, and participation* in public policy making. The purpose of this workshop is to inform members about the premises, principles, and purposes of public engagement activities, and to disseminate best practices.



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